

REMARKS

Claims 1-6, 8-10, 15-20 and 27-28 stand rejected under 35 U.S.C. §103(a) as being unpatentable over Montpetit in view of McKenna.¹ Applicants respectfully disagree.

The Examiner states that Montpetit discloses the claimed invention, except for the capacity management limitation. However, the Examiner asserts that McKenna discloses this feature. Applicants respectfully disagree.

As an initial overview, Montpetit discloses bandwidth on demand (BoD) for multiple packet classes, where a terminal can request for specific slots (i.e. time, frequency per bandwidth allocation table) over which it can send data packets. However, as noted by the Examiner, there is no disclosure of capacity management, which is required to configure the satellite digital payload across all demodulators (demods), such that BoD at packet and slot level can operate. That is, slot level allocation is different from capacity allocation, which includes geographic distribution considerations. Capacity management provides the provisioning framework within which BoD works. The instant application relates to automated capacity planning and provisioning of satellites.

McKenna discloses a content management over ground cellular network. This includes broadcast and narrowcast materials, and also relates to handoffs and BoD. The GUI, both locally and remotely, are used for programming user content, such as news, alerts, multimedia data, etc., distribution to the mobiles terminals in the ground cellular network (see paragraphs [0123] – [0129]). However, McKenna does not disclose capacity management, such that the system can be provisioned for data exchanges across satellite terminals, as required in the instant invention. For example, claim 1 recites sending commands to said payload processor in order to modify the payload configuration to satisfy the capacity allocation plan, based for example on system constraints. Capacity is directed to payload and resource configuration/allocation, whereas content delivery and distribution is directed to, in McKenna's case, classification.

Additionally, in ground cellular networks, each cell is typically supported by antenna and demod for that cell (fixed), whereas in the instant invention the antennas and demods are located

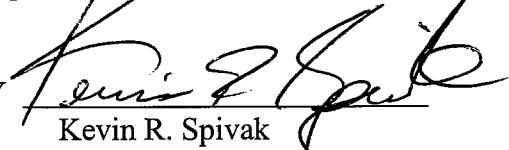
¹ Applicants note that the Examiner appears to indicate that claims 7 and 29 are similarly rejected (see Examiner's comments, page 9 of the Office Action).

in the satellite and connectivity is configurable (via a switch matrix) so that a demod can be used in different cells, at different times. The Examiner appears to equate the fast packet switch 67 in Figure 10 of Montpetit with the switch matrix in the instant invention. However, a fast packet switch processes data packets and, based on the address, sends it to a specific port, such as ISL or a terminal. A switch matrix, on the other hand is used to physically connect satellite payload components, such as demods and antennas. This enables the instant application to provide capacity management for a configurable payload such that traffic needs can be supported by the right number of demods in specific geographic cells. Once configured, the payload can then support BoD, where a terminal can request slots to send data. In the claimed invention, notably, the system can be provisioned to change the number of demods (and data rates) connected to an antenna supporting a cell on ground such that changing traffic on the ground can be better supported by appropriate payload configuration.

Since the recited structure and method are not disclosed by the applied prior art, either alone or in combination, claims 1 and 10 are patentable. All dependent claims are patentable for at least the same reasons.

The Applicants, therefore, respectfully submit that all pending claims are in condition for allowance, and request that a timely Notice of Allowance be issued in this case. If any fees are due in connection with this application as a whole, the Director is authorized to deduct such fees from deposit account no. 02-1818. If such a deduction is made, please indicate the attorney docket number PD-200257 (115426-816) on the account statement.

Respectfully submitted,

BY 
Kevin R. Spivak
Reg. No. 43,148
Customer No. 29158
Phone: 202.955.7007

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